Instructional Technology Newsline

Volume 1, Number 8
June, 2000

Department of Elementary and Secondary Education

Instructional Technology Staff

573/751-8247

- Deborah S. Sutton, Director
  dsutton@mail.dese.state.mo.us
- Kathy Parris, Supervisor
  kparris@mail.dese.state.mo.us
- Claranne Vogel, Supervisor
  cvogel@mail.dese.state.mo.us
- Lisa Walters, Library Media and Technology Consultant
  lwalters@mail.dese.state.mo.us
- Rosalyn Wieberg, Supervisor
  rwieberg@mail.dese.state.mo.us
- Kelly Kempker, Senior Secretary
  kkempker@mail.dese.state.mo.us

In This Issue…

◆ Instructional Technology Update

VIDEO Program Funding Update –

Senate Bill 944 was passed by the General Assembly and awaits Governor Carnahan's signing of the bill. When signed, VIDEO funds will be set at $4 million and result in a new funding distribution formula of $2000 per district plus $2.00 per student. Currently, the FY 2001 VIDEO Program has a funding capacity of $1.09 million. The Department must request supplemental funds to reach $4 million and, likely, these funds will not be received until next spring. Therefore, for this first year under the new bill, grant recipients will receive one-fourth of the state approved amount upon final approval of the grant application and the remainder upon receipt of the final expenditure report. Disregard the previous application packet that was mailed in March. Note that applications for next year will be automated. Plan to attend one of the workshops that will address the online application process.

Online Applications Update –

The VIDEO and Technology Acquisition and Enhancement grant applications will go online in mid August and the Technology Literacy Challenge Fund application, September 1–15. Please note the following:

1. The Department will not accept paper application forms for these programs.
2. Districts will need to secure user-ids and passwords to access the online applications. Request forms were mailed to districts on May 17 and should be completed and returned at soon as possible.

3. District staff should plan to attend an automated application workshop. A series of six workshops will be presented across the state during the first two weeks in August – see workshop schedule below. No registration is necessary.
4. The Department will "substantially approve" all Technology Acquisition and Enhancement and VIDEO applications with a July 1, 2000, date. We realize that many schools begin project activities in the summer and need authority to obligate funds in July. Both the VIDEO and Technology entitlement grants have been available for some time, and schools generally have used the funds for "customary" activities. As such, the substantially approved date will cover those activities and purchases for which district have received approval in the past. The final approved date, however, will reflect the date when all negotiation is complete. The first payment (one-half of the approved state request amount for Technology grants and one-fourth of the request for VIDEO grants) will be issued in the next available school payment.

Online Application Workshops Schedule –
The following workshops will be conducted around the state in August to discuss the online application submission and approval processes for VIDEO, Technology Acquisition and Enhancement, and TLCF grants. Registration is not necessary. All workshops will run from 10:00 AM to 1:00 PM.
August 3 – Cooperating School Districts, 1460 Craig Road, Creve Coeur, MO
August 8 – Camdenton High School Little Theatre, Hwy 5 South, Camdenton, MO
August 8 – UMKC, Room 307 Fine Arts Bldg., 5015 Holmes, Kansas City, MO *
August 9 – Nixa Empire Bank, Intersection of Hwy 160 and Hwy 14, Nixa, MO
August 10 -- Poplar Bluff District Adm. Offices, 1110 N. Westwood, Poplar Bluff, MO
August 10 – Macon High School Library, 702 Missouri, Macon, MO

* Note that the August 8th, Kansas City workshop can also be accessed from…
Maryville – in the ITV Room of the McKemy Center, 800 University Drive, on the Northwest Missouri State University campus;
St. Joseph – in Room 201 of the Leah Spratt Multipurpose Building, at 4525 Downs Drive, on the Missouri Western State College Campus; and,
Trenton – in Room 114 of the Frey Center, on Maple Street, on the campus of North Central Missouri College.

*e*MINTS Applications Approved –
In May, the Department tentatively approved 40 districts to participate in next year's *e*MINTS Project. These districts are: Adair County R-I, Avenue City, Rock Port, Fulton, Jackson, Cape Girardeau, Stockton, Southland, Sullivan, Washington, Springfield, Clinton, West Plains, Arcadia Valley, Hickman Mills, Grandview, Independence, Carthage, Festus, Knox County, Lebanon, La Plata, School of the Osage, East Prairie, Moniteau County R-I, Seneca, Couch, Oregon-Howell, Dora, Pettis County R-V, St. James, Parkway, Wellston, Orearville, Eminence, Shelby County R-IV, Milan, Kirbyville, Plato, and Sheldon. These districts join the 44 districts currently participating and bring the classroom teacher total to 168. See announcement at http://emints.more.net

Competitive Technology and Distance Learning Grants –
Applications for Competitive Technology and Distance Learning grants are due June 15. They will be read by a panel of readers, June 24-26. Competitive Technology grants will be read by quadrants. Distance Learning grants will be divided between Implementation and Upgrade grants. Each application will be evaluated by a panel of five readers. The high and low scores are thrown out and the three remaining scores totaled. Applications are placed in rank order within their competition based on total scores. Funding cut-off lines will be drawn by July 3 and funding status letters mailed to all applicants by no later than July 5th. Those receiving tentative approval will be contacted by Instructional Technology staff in July-August to negotiate the budget and award final approval.

Revised Equipment Threshold –
The Department's School Finance section and other sections managing grant programs have agreed to increase the unit cost that is used to define equipment or capital outlay, from $500 to $1,000. This will go into effect on July 1, 2000. However, as in the past, a district may establish a policy to use a unit cost of less than $1,000 to determine capital outlay.

Filtering Software Legislation Update –
Several people have been calling about Senate Bill 757 that was combined with Senate Bill 602 and passed by the General Assembly on May 12, 2000. An early version of the combined bill included a provision that would require schools to place filtering software on all internet-connected computers. However, when finally passed, SB 757 did NOT include a section or requirement concerning internet filtering software.

◆ ITEA's Technology Standards

http://www.iteawww.org
The International Technology Education Association (ITEA) and its Technology for All Americans Project have developed a list of 20 standards detailing what K-12 students should know about and be able to do in order to be technologically literate. Released in April, the standards were reviewed by the National Science Foundation, NASA, and other experts across the country. The ITEA standards deal with technology innovations and differ from the National Educational Technology Standards developed by the International Society for Technology in Education (ISTE) that stress instructional technology. ITEA standards are organized around content areas: the nature of technology, technology and society, abilities for a technological world, and the design world. A PDF version of the new standards document, "Standards for Technology Literacy: Content for the Study of Technology" can be accessed from the ITEA website.

◆ NEW -- Technology Planning Tip of the Month

Technology planning and evaluation are hot topics these days, especially with the number and variety of categorical programs available, e-rate savings, and the explosion in educational technology hardware and software offerings. In just the last three months, Missouri districts submitted plans to the Department to be state-approved for the e-rate program, the Department began its annual review of the Missouri technology plan and benchmarks (http://www.dese.state.mo.us/divinstr/instrtech/tech/techplan2000.htm), and the U.S. Department of Education posted revised national technology goals for review and comment (http://www.air.org/forum/).
Those involved in technology planning (regardless of whether at the national, state, or local level) know that it takes vision and commitment; that it is a fluid, continuous process that involves a lot of work, relationship building, managerial skills, persuasion skills, fine-tuning, and

time. The Technology Planning Tip series will help districts develop, evaluate, and revise their long-range technology plans. Beginning with this edition, Newsline will focus each issue on one aspect of the technology planning process. We will follow the process outlined in our April 1994 document, *Using Technology in Missouri's Schools – A Planning Guide* (http://www.dese.state.mo.us/divinstr/instrtech/workshops/planguid.htm) and Spring 2000 Technology Planning Outline (http://www.dese.state.mo.us/divinstr/instrtech/workshops/techplanoutline.pdf).

Technology Planning Tip #1 -- Select a Well-Rounded Technology Committee and Develop a Realistic Time Line for the Development of the Technology Plan

A district technology plan should focus on integrating technology into the teaching and learning process to transform the way teachers teach and students learn. At the very least, the technology plan should be embedded in or supplement the district's comprehensive school improvement plan. A planning committee is critical to the success of any technology plan. The committee should include expertise in planning, building a vision, needs assessment, curriculum and instruction, evaluation, goal setting, professional development, technology hardware, support and integration, media/marketing, and financial planning.

Technology planning is a major undertaking. Identify individuals who will commit to the process, who work well with others, are assertive and goal-oriented, and have good communications and management skills. Identify persons who have stake in the success of the district and those expected to implement the plan. Carefully identify persons within the district and in the community who will be sources of support during and after the initial planning process. Identify staff who have the power to accept or reject plan specifics, who have influence on public and fiscal acceptance and can garner the support of others. Then, from the pool of potential members, select the best team of individuals.

A sample technology planning committee might include:

- 1 Superintendent or other central office administrator
- 1 Principal
- 2 Technology coordinator, computer teacher, or other technology professional
- 1 Library media specialist
- 3 Teachers, representing different buildings, grades and content areas
- 2 Students
- 1 Board member and/or school committee member
- 1 Support staff
- 3 Parents
- 1 Community, town official
- 1 Higher education, education association or education foundation representative
- 1 Business expert (district or community)

- 1 Local business representatives (hardware, software, training, other)

Once the committee has been selected, designate a team leader. Select a leader with the management, communications, and persuasive skills necessary to keep the committee on task and moving through the process. Have agendas for each meeting. Meet frequently enough (perhaps weekly or biweekly) to keep the momentum going. Set regularly-scheduled meetings, but stagger the meeting times to help meet everyone's different workloads. As soon as possible define the specific role and responsibilities of each committee member. Empower members to meet – consider release time for teachers or stipend pay for out-of-contract time and effort.
A sample time line of meeting topics and tasks might unfold like this:

- June – select committee and schedule meeting times and places
- July – meet, lay groundwork, begin work on vision and mission
- August – assess current technology
- September – conduct needs assessment, analyze data and make recommendations
- October – establish goals and objectives
- November – develop technology action plans
- December – plan implementation schedule and evaluation methods
- January – secure funding options, submit final draft for internal review
- February – finalize the plan and get approved by local school board
- March – submit plan for state approval

◆eMINTS Video Wins National Award

Joint MOREnet/DESE program featured
eMINTS: Expanding for a Brighter Future, a video developed to highlight the eMINTS project, a joint venture of MOREnet (Missouri Research and Education Network) and Missouri's Department of Elementary and Secondary Education (DESE), has won an Award of Distinction in the recently announced Videographer Awards competition.

MOREnet is a part of the University of Missouri System (UMS) and provides internet backbone service and internet technology training to Missouri's K-12 schools, universities and colleges, libraries and state government. The award-winning video was developed cooperatively by MOREnet UMS Office of Social and Economic Data Analysis and UMS Cooperative Video Group.

eMINTS, an experimental project soon to enter its second year, places a treasure trove of instructional technology in school classrooms throughout Missouri. During the 1999-00

academic year, 88 teachers - in 44 school districts throughout Missouri - participated in the eMINTS program.

"We went into schools and loaded a couple of classrooms with every teacher's fantasy list of educational technology," explained MOREnet's MINTS project director Bill Giddings. "The result was truly amazing," Giddings said, "Teachers changed from being the individual who stands in front of the classroom and disseminates information to being the person who facilitates the students' process of discovery and use of information."

eMINTS classrooms have high speed internet connections, teacher stations, SmartBoards, a computer for every two students, and related peripherals and software. Ample technical support, as well as an aggressive professional development program for participating teachers, ensure efficient operation of the classroom technologies and integration of the technologies into the curriculum

The video is available to view on MOREnet's web site (www.more.net) at the following URL - http://emints.more.net/evaluation/mints_report.html#video. The Videographer Award of Distinction is given for projects that clearly exceed industry standards. Videographer Awards is a national organization which helps set the standards for the video production industry. Other award winners this year included: ABC News, 20/20 Downtown; Cedars-Sinai Medical Center; Lockheed Martin; Chicago Police Department; Nike; Kresge Art Museum at Michigan State University; U.S. Army; Underwriter's Laboratories; and, The University of Georgia's Georgia Public Television.

◆Copyright Question of the Month

Q: What are the penalties if the educator **willfully** infringed the copyright?

A: The copyright owner may receive substantial awards: $500 to $20,000 per work infringed upon and up to $100,000 in cases of willful infringement. Under certain circumstances, if the infringement is willful and for purposes of commercial advantage or private financial gain, or if the infringement is willful and the total retail value of the infringement exceeds $1,000 without any regard to financial motivation, criminal liability may be attached with penalties including both imprisonment and fines. **If the total retail value of the infringement exceeds $2,500, the criminal violation is a felony and, in Missouri, will result in the revocation of teaching certificate.**

◆Ask the Expert, Be the Expert

Response submitted by Deborah Sutton, Director of Instructional Technology, Department of Elementary and Secondary Education, based on recent questions relating to the professional development required in all of the instructional technology grant programs.

Q: Our district has planned several technology training activities to meet the 20% professional development requirement for the Technology Acquisition and Enhancement grant. Can these same funds (some local and some from the grant) be used to meet the professional development requirement for VIDEO and/or other technology programs? Can the same funds be used to meet local match requirements?

A: Yes, but only if the activities and expenditures are appropriate for and allowable under both grant programs. All programs administered by the Instructional Technology section make this allowance. While we encourage districts to find new moneys to increase districts' overall technology budgets, we understand that school budgets can be tight. Thus, we allow Technology Acquisition and Enhancement funds to match VIDEO, Competitive Technology, and/or Technology Literacy Challenge Fund funds. Likewise, local professional development funds that are used to satisfy the technology training for one grant may also be used, where appropriate, to meet training and/or match requirements for another grant.

Q: Our district plans to hire a technology staff development person. This person's main responsibility will be technology training. Can part of his/her salary be used to meet the 20% professional development requirement? **Variation**: Our district has a salaried trainer (perhaps a technology coordinator, Title I person, or another specialist) who will be responsible for training teachers (on a particular program or application). Can we apply substitute funds for a person taking over for the trainer while he/she is providing training?

A: Yes. The intent of the 20% professional development requirement is to help assure that teachers and students know how to use the technologies being purchased – not to create extra fiscal or accounting burdens. If you have someone on staff who provides training, instead of having to hire a consultant or pay training fees, determine the costs specifically related to that training and document them in your proposed budget. Appropriate costs might include substitute pay, teacher and/or trainer stipends for out-of-contract time, duplication of training materials, or an appropriate (and documentable) portion of the trainer's salary.

◆Learning With Technology

Featuring Mansfield R-IV and Nevada R-V

Nevada R-V
Teaching and Learning for High Performance

Our project goal was to "increase student interest and participation in relevant activities made possible by networked computer technologies and technology-trained teachers; and as a result, Nevada R-5 students in grades K-8 will achieve in math and communications at high levels of performance".

To effectively use computer technologies in grades K-8, we had three major hurdles to accomplish: (1) provide Internet cabling to all instructional spaces, (2) purchase computers of sufficient speed and memory to efficiently access Internet and (3) train all teachers and support staff to use these technologies with confidence!

We first developed a "strategic master plan" for implementing a district-wide computer network, our own LAN (local area network). We accomplished this with a community advisory that meets three times each school year to revise and update our district technology plan as a part of our Comprehensive School Improvement Plan. Once we had a blueprint and timeline of how we wanted to proceed in place, and the TLCF funding became available, we completed our internal cabling of our elementary and middle school classrooms.

As the cabling project progressed, our technology coordinator began training sessions during

the first two weeks in August and after school from 3:00 - 5:00 p.m. for the first two weeks in September. We also provided commercial trainers for software (Accelerated Reader and Wiggle Works) and hardware (Smartboard and Depco).

We invited all six of our local banks to fund a Dollar$ and $ense math and economics program in our fourth grade. The Missouri State Treasurer, Robert Holden came to our schools because our program represented such a large and successful business-education partnership. Our students, using Internet, then researched currency and banking and teleconferenced and emailed with students in other schools across Missouri. This year long program developed and enhanced both math and reading skills.

Electronic writing portfolios and Accelerated Reader have been implemented in grades 2-8 to develop language and reading skills. Digital and video cameras are being used for e-classroom sharing with other schools with similar projects as ours. Data projectors at our grade 3-5 elementary and middle school, grades 6-8 have been purchased to be used for student presentations. Smartboards are being incorporated for student projects, as well.

As this project progressed, our student achievement in both reading and math has shown gains on our Stanford Nine off year testing in grades 2, 3, 5, 6 and 7. We have added a K-5 server to manage our students' reading and writing records. Our students continue to access wonderful interactive websites via Ebsco and other preselected website services.

In year two, we will continue our network cabling to first and second grade classrooms not previously connected. We have some wonderful reading and writing activities planned for our third, fourth and fifth graders with the historic Fort Scott National Monument made possible with Internet access. We conducted a full day, whole district technology training day in February 2000 and are planning workshops again in early August to run through September. Our technology advisory group meets again in September to update and restudy future needs and direction for technology for our students.

TLCF has provided the connectivity to the rest of the world that our students in rural west central Missouri so need! We must get in the car or load students on a bus and drive 1-2 hours in any direction to get to a large library, art museum, music hall or science center. With TLCF making our connection to the cyberworld possible, all of these opportunities come to us!

"While computers will never replace teachers; teachers who use them will replace those that don't."
(For imore information about the project, contact Christi Peterson (417-448-2000).

Mansfield R-4
Fading Voices Experience State of-the-Art Technology

Students and teachers at Mansfield R-4 school endeavored to have “Fading Voices” of our community be heard again. With teacher directed help the students explored personal histories, genealogical backgrounds, historical facts and significant local events as told and seen through the eyes of our elderly population. Utilizing our “Fading Voices” gave the students and teachers the opportunity to open avenues of communication, which were unavailable before.

First: Teachers received intensive training integrating technology into their social studies and

language arts curriculum.

Second: Through the integration of this new technology received, students interviewed and recorded the information they collected using the computer programs, Microsoft Works 4.0 and Print Shop. Many students interviewed their own grandparents and great grandparents. This helped them to learn their own history plus having quality time with family.

Third: Having parents involved was another part of the project that continued the communication with the community and our "Fading Voices." Using the upper-grade students as mentors and the Middle School computer lab where the new technology was established, everyone had opportunities to create their own projects. The major ones created included conducting interviews for biographical sketches and personal histories, developing their own web sites and communicating via E-mail about past, present, and future local events. Times to use the computer lab were scheduled to fit the need of the individuals involved.

In the second year of the grant, the mentoring and communication continued with more training for the teachers and open lab time for all involved.

As our community goes "on-line" continued plans are to access our city hall, our historical society, the Wright County Library and Courthouse and the Laura Ingalls Wilder Home and Museum.

Anyone interested in discovering the history of their community through their "Fading Voices," contact Susie Graham (417-924-4100) or at **fup000@mail.connect.more.net**

◆Mark Your Calendar

June	
12	VIDEO Advisory Committee Meeting Jefferson Building, 14th Floor, Jefferson City, MO 10:00-2:00 p.m.
15	Competitive Technology and Interactive Distance Learning Grants deadline
26-28	Reading of Competitive Technology and Interactive Distance Learning Grants
30	Final day to obligate funds for salaries, benefits, services and travel for the Technology Acquisition and Enhancement, Interactive Television, Competitive Technology and VIDEO Grants
30	Obligation of funds for materials, supplies, and equipment purchases for TLCF Grants
July	
3	Mail grant notification approval letters (Competitive Technology and Interactive Distance Learning Grants)
3	Publish Newsline on the web
6	Final ¼ Payment (State Technology and VIDEO Grants)
15	Deadline FER's/PEN's (State Technology and VIDEO Grants)

◆Upcoming 2000 Conferences

June 26-28	National Educational Computing Conference

	"Connecting @ the Crossroads" Atlanta, GA
August 2-5	Conference on Distance Teaching and Learning Madison, WI
August 10-11	School Technology Leadership Conference Sheraton San Diego Harbor Hotel & Marina San Diego, California
August 17-19	School Tech Chicago Exposition & Conference Chicago Hilton & Towers Chicago, IL

◆Internet Sites of Interest

How Computer Viruses Work http://www.howstuffworks.com/virus.htm
"I Love You" and Melissa…Find out about dangerous computer viruses, the traditional and email viruses. How do they work and how can you protect your computer?

Diagnosis and Evaluation of the Child With Attention-Deficit/Hyperactivity Disorder
http://www.aap.org/policy/ac0002.html
The American Academy of Pediatrics offers recommendations for guidelines for the assessment of school age students with attention-deficit/hyperactivity disorder. These guidelines were developed by a panel of medical, mental health and educational experts.

Leadership: Great Ways To Improve Rural Education in America
http://www.ruralschools.org
Organizations Concerned about Rural Education (OCRE), a coalition of more than two dozen education, farm, rural, technology, and utility organizations, has created this web site devoted to informing you about rural education issues. Visit the "News Update" section which highlights new developments in rural education, and the "In the Spotlight" section informs you on hot topics, like whether a census undercount is hurting rural areas.
Be sure to look at the "Take Action" section to learn ways to get involved in your community. Throughout this site you'll find very valuable information about what you can do to improve public schools, what your neighbors are already doing, and what is being done throughout rural America.

Curriculum: "Find Out Why" Appeals To Inquiring Minds
http://www.nsf.gov/od/lpa/events/fow/start.htm
Produced by the National Science Foundation (NSF) in partnership with Time for Kids, "Find Out Why" lets you discover the science behind news stories and events in your daily life. Find answers to questions like: "Why do rainbows happen?" and "Why does a baseball bat have a sweet spot where every home run slugger wants to hit the ball?" Each month's questions include activities to help you discover the answers, as well as a "cool science book of the month" that invites you to further explore this topic.

From Blue Web'n http://www.kn.pacbell.com/wired/bluewebn
Blue Web'n Update lists the weekly additions to Blue Web'n, a searchable library of Blue-Ribbon Web sites categorized by grade level, content area, type, and Dewey number.

KidsClick: Worlds of WebSearching http://www.worldsofsearching.org/
The Ramapo Catskill Library System put together a great site geared to help teach students how to search the web for the information they need.
Do you understand how sorted subject guides (directories or indexes) work? Check out "World 2." Keyword searching is covered in three different "worlds" so that students can learn the importance of spelling and putting words into phrases.

◆From the Mailbag

From K12 TechWatch k12techwatch@listserv.eschoolnews.com
A free news service providing school technology resources, special events, and management tools for professional educators. If you would like to subscribe, send a blank e-mail to join.

TechConnect Grants
These grants are available from the Electronic Industries Foundation (EIF). The grants encourage creative teaching by supporting technology-based math and science projects in the classroom. Grants are targeted for use in fifth through eighth grade math and science classrooms. No deadline. www.eia.org/eif/techconnect.htm

Opportunities for Professional Development

Computers for Lunch—web site to do activity-based technology lessons for 20 minutes, one or two lunch-hours a week for two or three months. http://www.sfu.ca/-clf/index.htm

Co-nect—web-based on-and off site training for $65,000 a year for 40 teachers.
http://www.co-nect.net

Knowledge Adventure—satellite transmitted courses covering software titles on the web. Training modules are “bite-sized” lasting 30 seconds to three minutes. Three-year package for about $10,000 a year. http://www.knowledadventure.com

Macromedia—online training to learn basic web skills and to add web curriculum to all disciples. The course costs $119 per teacher. http://www.trainingcafe.com

National Computer Systems (NCS) offers Mentor for Writing that teaches how to score writing assessments, Mentor for States that can be customized to state standards, and Educational Structures which provides staff development through access to online, customizable lesson plans and web resources. A full year of customizable lesson plans correlated to state and national standards and online tutorials and classroom management embedded throughout the program.
http://www.ncs.com

nschool.com is a free, web-based communication system for schools. This self-paced, online 10 module course helps individual schools create web sites for communication among teachers, administrators, parents and students. http://www.nschool.com